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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/596,982

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Rainer Mueller

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EXAMINER

GREEN, RICHARD R

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/596,982	Applicant(s) MUELLER ET AL.	
	Examiner Richard R. Green	Art Unit 3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,8,9,11,12,15 and 21-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,11,12,15 and 21-30 is/are rejected.
- 7) ☒ Claim(s) 2-6,8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/30/2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/2/2010 has been entered.

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the:

- Embodiment wherein both the first and second flat insulation end sections of each of at least two fuselage insulation packages are attached by the same first retainer end to the same rib attachment region of **claim 1** (this would have the first end of the first attachment element passing through holes in four flat end sections, and the second end passing through second holes in at least two packages; in fig. 4, the first retainer end passes through only two flat end sections, and the second retainer end passes through only a single package);
- Embodiment containing a second attachment element of **claim 1** in combination with first and second retainers of **claims 24 and 28-30** (fig. 4 shows two elements 13, to which all three of these elements appear to correspond);

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- Embodiment wherein the insulated disc element of claim 1 comprises both a disc-shaped core element, as recited in **claim 1**, and a first insulation disc with a hole smaller in diameter than the external diameter of a dome-shaped casing, as recited in **claim 11** (while figures 6 and 6a show a first insulation ring 48, distinct from the second insulation ring 49 which comprises the disc-shaped core 52, the diameter of the ring 48 is shown to be larger than that of the ring 49, and it is not clear which element in the figures could be considered as a disc which comprises both a first disc and a disc shaped core);
- Embodiment wherein the cover area of the insulated disc comprises first and second insulation rings, with insulation braces spaced apart on the interior diameter of the first ring and the exterior diameter of the second ring, as recited in **claim 12**, in combination with the disc-shaped core of **claim 1** (fig. 6a shows insulation braces 51 on the exterior diameter of the core 52 and the interior diameter of ring 49, and from Specification ¶ 51 the braces may be attached to the interior diameter of both first and second rings 48, 49; the insulation braces are shown to be spaced apart on the exterior diameter of the disc-shaped core element 52, and not on the external diameter of either ring, and the core element is already claimed in the parent claim)

must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. See also the discussion below regarding claims 11, 12, 24 and 28-30; amendment to overcome the rejections set forth under 35 USC 112, 1st paragraph, in this Office action could render moot these drawing objections.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

Claims **1-3, 11 and 12** are objected to because of the following informalities:

In claim **1**, line 2, "the aircraft" should be deleted, such that the insulation system comprises all elements of claim 1. Note that in line 41, "the insulation package system further comprising" conflicts with "the aircraft comprising" of the preamble. Additionally, all claims which depend from claim 1 refer to "the insulation package arrangement of claim 1".

In claim **1**, lines 12-13 (¶ 4), "—a first end of—" should be inserted before "each of the at least two fuselage insulation packages", to provide antecedent basis for later reference in line 15.

In claim **1**, lines 15-16 (¶ 5), "—at a second end—" should be inserted before "opposite to the first end", to clarify from where the second flat insulation end section extends; and "—each of—" should be inserted between "the first end of" and "the at least two fuselage insulation packages", or else the second "the at least two fuselage insulation packages" could be deleted.

In claim **1**, line 26 (¶ 7), "wherein the first..." should preferably start a new indented paragraph.

In claim **1**, line 30 (¶ 7), "—one side of—" should be inserted before "the rib attachment region of the rib", to clarify to what side the opposite side of lines 34-35 opposes.

In claim **1**, line 35 (¶ 7), "the attachment element" should be "the —first— attachment element", since a second attachment element is now recited later in the same claim.

In claim **2**, line 21, "a burn-through-proof attachment element" should be "a — first— burn-through-proof attachment element", since a second attachment element is now recited later in the same claim. Similarly, in lines 24 and 33, insert "first" before "burn-through-proof attachment element".

Further, in claim **2**, line 21, "having a first retainer end at one end of the first attachment element and a second retainer end at an opposite end of the first

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attachment element" should be inserted between "attachment element" and ", wherein", since reference is made to these elements in lines 34-36 of the claim.

In claim **3**, lines 2 and 3, "first" should be inserted before "burn-through-proof attachment element", to differentiate from the second attachment element, which is also described to be burn-through-proof.

In claim **11**, line 3, "comprise" should read, "comprises".

In claims **11 and 12**, "or ring element" (line 2) lacks sufficient antecedent basis, since this limitation was not brought from claim 10 into claim 1. Either "or ring" can be deleted from both claim 11 and 12, or it should be inserted into line 44 of claim 1, between "insulated disc" and "element".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims **1, 11, 12, 15 and 21-30** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1: The arrangement described in lines 26-37 of the claim (§ 7) contains new matter in that it describes both ends of both fuselage packages but only one rib attachment region, resulting in an arrangement where both of the first and second end sections of both packages are attached to the rib attachment region by the first retainer end of the first attachment element (in lines 26-33), and both packages are also retained on the opposite side of the attachment region by the second retainer end (in lines 33-37).

Prior to the present amendment, in lines 26-33, the "first flat insulation end section of the first one of the pair of fuselage insulation packages" and "the second flat insulation end section of the second one of the pair of fuselage insulation packages" were both attached by the first attachment element. Changing "the first one" and "the second one" both to "each" removes the distinction between the two packages, so that the first flat end of each package and the second flat end of each package are all attached by the first attachment element, which does not appear to have been intended.

The originally filed disclosure provides support for an arrangement wherein a first end of a first package and a second end of a second package are both retained on one side of a rib, while the first end of the first package is also retained on an opposite side of the rib, by a first attachment element. The presently claimed arrangement lacks support in the original disclosure, since it requires also the first end of the second package and the second end of the first package to be attached by the first attachment element.

The following amendments to lines 26-37 (¶ 7) of claim 1 are believed to overcome this rejection:

"wherein the first retainer end of the first attachment element attaches both of the first flat insulation end section of [[each]] –a first– of the at least two fuselage insulation packages and the second flat insulation end section of [[each]] –a second– of the at least two fuselage insulation packages to –one side of– the rib attachment region of the rib via a hole in each of the first flat insulation end section –of the first of the at least two fuselage insulation packages– and the second flat insulation end section of [[each]] –the second– of the at least two fuselage insulation packages such that a portion of each of the –first and second of the– at least two fuselage insulation packages overlap, and [[each]] –the first– of the at least two fuselage insulation packages [[being attached via the hole in the first flat insulation end section]] is also retained on the opposite side of the rib attachment region by the second retainer end of the –first– attachment element passing through a second hole formed in [[each]] –the first– of the at least two fuselage insulation packages,"

Regarding claim 11: Parent claim 1 already claims that the second attachment element comprises "an insulated disc element", which disc element comprises "a disc-shaped core element", and these claim features appear to respectively correspond to elements 49 and 52 of figures 6 and 6a. In claim 11, "a first insulation disc" is introduced with a hole having a diameter less than that of a dome-shaped casing of an end region of the first attachment element, "such that the second attachment element fits over the dome-shaped casing with a tight fit."

In the Specification filed 6/30/2006 with paragraph numbering, in paragraph 50 (page 12), support is found for a second attachment element comprising first and second insulation discs, the first of which having a hole of a diameter smaller than that of the dome-shaped casing and the second of which having a hole of a diameter equal to or slightly larger than that of the dome-shaped casing. In paragraph 51, support is found for an alternative embodiment of the second attachment element, comprising first and second insulation rings, and a disc shaped core element situated in the same plane as the second insulation ring. The second insulation ring, like the first insulation disc, is described to have a hole diameter smaller than that of the end region of the dome shaped casing in paragraph 52, though this appears to correspond with the manner in which the disc-shaped core is described at the end of paragraph 51, "wherein the core element 52 comprises a hole in the centre of the disc". In this embodiment, no mention is made of the internal diameter of the first ring.

The originally filed disclosure lacks clear support for an insulation disc having a hole diameter smaller than that of the end region of a dome shaped casing in combination with a insulation disc having a disc-shaped core embedded in a casing. Note that originally claims 11 and 14 were claimed in parallel chains of dependency. Original support exists for the hole diameter of the insulation disc comprising a disc-shaped core being smaller than that of the end region of the dome shaped casing, in paragraphs 51-52.

If the insulated disc comprising a disc-shaped core element of claim 1 corresponds to the same element as the first insulation disc of claim 11, then the claim

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should be amended to clarify that the same element is meant, perhaps using the language of Specification paragraph 51, where the disc shaped core element "comprises a hole in the centre of the disc".

Regarding claim 12: The originally filed specification provides support for insulation braces attached "on the interior ring diameter of the first and the second insulation ring 48, 49" and on "the external circumference of a disc-shaped core element 52" (¶ 51). Fig. 6a shows braces 51 extending from the inside of ring 49 to the outside of the disc shaped core 52. Insofar as the plastic casing of the core 52 can be considered as forming an insulation ring of the cover area of the truncated-cone body, then support exists in the original disclosure for braces between the external diameter of the casing of the disc-shaped core and the interior diameter of one of the insulation rings 48, 49. However the disc-shaped core and its casing have previously been claimed in parent claim 1, and claim 12 introduces the second insulation ring as a new feature.

There is support in the original disclosure for braces attached on the interior diameter of first and second insulation rings, as well as on the exterior diameter of the disc-shaped core element.

Regarding claims 24-30: Parent claim 1 has been amended to recite "a second attachment element", which corresponds to one of the elements 13 depicted in figure 4 of the originally filed disclosure. The first and second retainers described in claim 24 also correspond to these elements, however, resulting in three claimed elements, only two of which finding support in the original disclosure. This rejection may be overcome

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by amending the language to clarify that only two of the second attachment elements are present in any particular joint, noting that dependent claims 28-30 further limit the first and second retainers.

The following amendments are believed to overcome this rejection:

In **claim 24**, lines 1-4, "~~further comprising~~ wherein:

~~a first retainer~~ the second attachment element is attached to the first retainer end and ~~a second retainer~~ a further second attachment element is attached to the second retainer end such that the first ~~retainer~~ covers the hole in each of the flat insulation sections of the at least two fuselage insulation packages and the second ~~retainer~~ covers the hole"

In **claim 28**, lines 3-4, "...for retaining ~~the first retainer and the second retainer~~ each of the second attachment elements, respectively."

In **claim 29**, lines 1-2, "...wherein the ~~first retainer and the second retainer~~ second attachment elements are each further comprised of..."

In **claim 30**, line 2, delete "of the first retainer and the second retainer"

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **1, 11, 12, 15 and 21-30** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1: In the Office action of 2/2/2010, the examiner suggested that "each of" be inserted into paragraph 4, and that "the pair" be replaced with "at least

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two" (page 2 of action mailed 2/2/2010, under heading "Claim Objections"). Insertion of the term "each" into paragraph 7 has substantially altered the scope of the claim, however, rendering the claim indefinite in that it is difficult to determine how the insulation packages are arranged, as presently written, particularly in lines 26-37 (¶ 7).

Prior to the present amendment, in lines 26-33, the "first flat insulation end section of the first one of the pair of fuselage insulation packages" and "the second flat insulation end section of the second one of the pair of fuselage insulation packages" were both attached by the first attachment element. Changing "the first one" and "the second one" both to "each" removes the distinction between the two packages, so that the first flat end of each package and the second flat end of each package are all attached by the first attachment element, which does not appear to have been intended.

The claim is indefinite because it is not clear if "both" in line 27 is meant to encompass all of the at least four elements described by "the first" and "the second flat insulation end section of each of the at least two fuselage insulation packages" in lines 27-30; the "each" in lines 28 and 29 refers to every package of the at least two packages. The suggestions made above regarding the rejection under the first paragraph of section 112 would overcome this rejection.

Regarding claims 24 and 29: it is not clear if the first and second retainers correspond to the same element as the "second attachment element" claimed at the end of parent claim 1, and so it is unclear whether the "disk of a first burn-through-proof material" is a further disc in addition to the "insulated disc element" of the second attachment element of parent claim 1. Figs. 6 and 6a show first and second rings 48,

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49, of which the second ring 49 is part of a disc which comprises a disc shaped core 52, so there is support for a second disc, in ring 48. If a second disc is intended, then preferably "second", or "further" should be inserted prior to "disk" in lines 2 and 4 of the claim, to distinguish it from the previously claimed "insulated disc element" of claim 1.

Response to Arguments

Applicant's arguments, see page 11, filed 6/2/2010, with respect to the rejection of limitations from claim 14 incorporated into claims 1 and 2, have been fully considered and are persuasive, in light of further amendment to claims 1 and 2 describing the disc-shaped core element to be part of the second attachment element. It is persuasive that one of ordinary skill in the art would not consider an aircraft tire to fall within the scope of the claimed second attachment element.

Allowable Subject Matter

Claims **2-6, 8 and 9** are allowed.

Further, claims **1, 11, 12, 15 and 21-30** could be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 1st and 2nd paragraphs, set forth in this Office action.

As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard R. Green whose telephone number is (571)270-5380. The examiner can normally be reached on Monday - Thursday 8:00 am - 6:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Mansen can be reached on (571)272-6608. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/R. R. G./
Examiner, Art Unit 3644

/Tien Dinh/

Primary Examiner, Art Unit 3644